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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,926	12/27/2000	Takeshi Misawa	3562-0111P	3447

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/747,926

**Applicant(s)**

MISAWA ET AL.

**Examiner**

Nelson D. Hernandez

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1, 5, 7, 8, 9 and 17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 3, 7-9, 11, 13 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Okada, US Patent 6,727,954 B1.

Regarding **claim 1**, Okada discloses an input unit (Figs. 2: 3 and 3: 3) disposed on an equipment (Figs. 2: 2 and 3: 2) for inputting a user's instruction to the equipment, comprising: a cross key (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) having a crossing part, said cross key being physically disposed on the equipment (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof; and a display arranged (Figs. 2: 12 and 3: 12) to be wedged in said crossing part of said cross key (Col. 6, lines 26-55; col. 8, lines 4-32; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 3**, Okada discloses that the display displays information related to an operation state of the equipment (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 7**, Okada discloses an input unit (Figs. 2: 3 and 3: 3) disposed on an equipment (Figs. 2: 2 and 3: 2) for inputting a user's instruction to an the equipment, comprising: a display (Figs. 2: 12 and 3: 12); and a switch portion (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) arranged in surroundings of said display, said switch portion being physically disposed on the equipment (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof, and said switch portion is assigned with a plurality of the functions including at least a function associated with a relative position with respect to said display (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 8**, Okada discloses an input unit (Figs. 2: 3 and 3: 3) disposed on an equipment (Figs. 2: 2 and 3: 2) for inputting a user's instruction to the equipment, comprising: a display (Figs. 2: 12 and 3: 12); and a plurality of switch portions (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) arranged in surroundings of said display, said switch portions being physically disposed on the equipment (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof, and said switch portions respectively assigned with the functions corresponding to relative positions of said plurality of switch portions with respect to said

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display (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 9**, Okada discloses an information recording apparatus (Figs. 2: 2 and 3: 2) for recording external information, including an input unit (Figs. 2: 3 and 3: 3) disposed on the recording apparatus (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for transmitting a user's instruction to said information recording apparatus, said input unit comprising a cross key (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) and a display (Figs. 2: 12 and 3: 12) arranged to be wedged in a crossing of said cross key, wherein said cross key is physically disposed on the recording apparatus (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 11**, Okada discloses a mode switch (Figs. 2: 14 and 3: 14) for setting an operation mode of said information recording apparatus, wherein said display displays information related to said operation mode set by said mode switch (Col. 8, lines 4-32).

Regarding **claim 13**, Okada discloses that the display unit displaying said information, and said display unit are arranged on the same face of said information recording apparatus as each other (See figs. 2 and 3) (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 17**, Okada discloses a digital camera (Figs. 2: 2 and 3: 2) for capturing an image, comprising: an image-capturing unit (Fig. 18: 239) operable to

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capture an image; a capture-controlling unit (Fig. 18: 213 and 207) operable to control said image-capturing unit; a processing unit (Fig. 18: 208) operable to process said image; and an operating unit (Figs. 2: 3 and 3: 3 operable to transmit a user's instruction at least to said processing unit disposed on the digital camera, said operating unit comprising a cross key (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) and a display (Figs. 2: 12 and 3: 12) arranged to be wedged in a crossing of said cross key, wherein said cross key is physically disposed on the digital camera (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof (Col. 6, lines 26-55; col. 8, lines 4-23; col. 15, line 19 – col. 16, line 59 col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **4**, **15** and **16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada, US Patent 6,727,954 B1 in view of Kojima, US 2002/0082080 A1.

Regarding **claim 4**, Okada does not explicitly disclose that the background color of the dot matrix display is changed in accordance with an operation state of the equipment.

However, Kojima teaches an image processing method wherein the background color in a display unit (Fig. 1: 25) is changed according to an operation state of the equipment (Page 6, ¶ 0110).

Therefore, taking the combined teaching of Okada in view of Kojima as a whole, it would have been obvious to one of ordinary skill in the art at the time of the invention to change the color of the background according to an operation state of the equipment. The motivation to do so would help the user to be aware of the operation state of the equipment when using the input unit.

Regarding **claim 15**, Okada does not explicitly disclose that the dot matrix display is arranged to have a plurality of background colors, and one of said plurality of background colors is selected in accordance with an operation mode of said information recording apparatus.

However, Kojima teaches an image processing method wherein the background color in a display unit (Fig. 1: 25) is changed according to an operation state of the equipment (Page 6, ¶ 0110).

Therefore, taking the combined teaching of Okada in view of Kojima as a whole, it would have been obvious to one of ordinary skill in the art at the time of the invention to change the color of the background according to an operation state of the equipment. The motivation to do so would help the user to be aware of the operation state of the equipment when using the input unit.

Regarding **claim 16**, grounds for rejecting claim 15 apply here.

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6. Claims **2, 5, 6, 10, 12** and **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada, US Patent 6,727,954 B1 in view of Anderson, US Patent 6,154,210.

Regarding **claim 2**, Okada does not explicitly disclose that display displays in the vicinity of said switch portions of said cross key information related to functions assigned to said respective switch portions of said cross key.

However, Anderson teaches a digital imaging device (Figs. 1A: 110 and 2B: 110) comprising a button interface (Programmable soft keys shown in figs. 1A: 416 and 2B: 416) for controlling the operations of said imaging device in combination with a display (Figs. 1A: 402 and 2B: 402) (Programmable soft keys operate based on a operation displayed in the display for each soft key) (Col. 5, line 7 – col. 7, line 67).

Therefore, taking the combined teaching of Okada in view of Anderson as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by displaying in the vicinity of said switch portions of said cross key information related to functions assigned to said respective switch portions of said cross key. The motivation to do so would help to minimize the amount of buttons in the equipment making possible to reduce the size of the equipment making it more portable.

Regarding **claim 5**, Okada discloses an input unit (Figs. 2: 3 and 3: 3) disposed on an equipment (Figs. 2: 2 and 3: 2) for inputting a user's instruction to an the equipment, comprising: a display (Figs. 2: 12 and 3: 12); and a plurality of switch portions (Fig. 2, buttons 19a to 19d; fig. 3, buttons 19a to 19d) arranged in surroundings



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of said display at positions sandwiching said display so as to oppose to each other, said switch portions being physically disposed on the equipment (see buttons 19a-19d physically disposed on the camera 2 as part of the input unit 3 in fig. 2) for presenting functions thereof (Col. 6, lines 26-55; col. 8, lines 4-32; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4). Okada does not explicitly disclose that the display displays in the vicinity of the switch portions information related to the functions respectively assigned to the switch portions.

However, Anderson teaches a digital imaging device (Figs. 1A: 110 and 2B: 110) comprising a button interface (Programmable soft keys shown in figs. 1A: 416 and 2B: 416) for controlling the operations of said imaging device in combination with a display (Figs. 1A: 402 and 2B: 402) (Programmable soft keys operate based on a operation displayed in the display for each soft key) (Col. 5, line 7 – col. 7, line 67).

Therefore, taking the combined teaching of Okada in view of Anderson as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by displaying in the vicinity of said switch portions of said cross key information related to functions assigned to said respective switch portions of said cross key. The motivation to do so would help to minimize the amount of buttons in the equipment making possible to reduce the size of the equipment making it more portable.

Regarding **claim 6**, Okada discloses that the switch portions are respectively arranged at four positions including an upper, a lower, a right, and a left portion of said display (See figs. 2 and 3). Grounds for rejecting claim 5 apply here.

Regarding **claim 10**, Okada does not explicitly disclose that display displays in the vicinity of said switch portions of said cross key information related to functions assigned to said respective switch portions of said cross key.

However, Anderson teaches a digital imaging device (Figs. 1A: 110 and 2B: 110) comprising a button interface (Programmable soft keys shown in figs. 1A: 416 and 2B: 416) for controlling the operations of said imaging device in combination with a display (Figs. 1A: 402 and 2B: 402) (Programmable soft keys operate based on a operation displayed in the display for each soft key) (Col. 5, line 7 – col. 7, line 67).

Therefore, taking the combined teaching of Okada in view of Anderson as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by displaying in the vicinity of said switch portions of said cross key information related to functions assigned to said respective switch portions of said cross key. The motivation to do so would help to minimize the amount of buttons in the equipment making possible to reduce the size of the equipment making it more portable.

Regarding **claim 12**, Okada discloses that the display unit displaying said information, and said display unit are arranged on the same face of said information recording apparatus as each other (See figs. 2 and 3) (Col. 6, lines 26-55; col. 8, lines 4-23; col. 17, lines 13-58; col. 18, lines 23-34; col. 24, line 59 – col. 25, line 4).

Regarding **claim 14**, the combined teaching of Okada in view of Anderson teaches that the input unit is arranged on a face of said information recording apparatus that faces a user when the user uses said information recording apparatus in such a

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manner that said input unit is positioned at an upper portion of a center of the face on a right side of the center (Fig. 8 in Anderson, teaches the display at an upper portion of a center of the face on a right side of the center; col. 11, lines 34-40).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (571) 272-7308. The fax phone


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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez  
Examiner  
Art Unit 2612

NDHH  
April 5, 2005

  
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